

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A negative electrode for a non-aqueous electrochemical cell comprised of an intermetallic compound having as its basic structural unit the formula M_2M' in which M and M' are selected from two or more metal elements including Si, and the M_2M' structure is a Cu_2Sb -type structure.
2. A negative electrode of claim 1, in which M_2M' has a fully disordered structure or a partially disordered structure.
3. A negative electrode of claim 1, in which M_2M' is a non-stoichiometric compound in which the M:M' ratio falls within the range 2.33: 1 to 1.67:1.
4. A negative electrode of claim 3, in which M_2M' is a non-stoichiometric compound in which the M:M' ratio falls within the range 2.1:1 to 1.9:1.
5. A negative electrode of claim 1, in which M is Cu, Mn and/or Li, and M' is Sb.
6. A negative electrode of claim 5, in which the Li content if present is 20 atom percent or less of the M_2M' structure.
7. A negative electrode of claim 1, in which M_2M' is Cu_2Sb or Mn_2Sb .
8. A negative electrode of claim 1, in which Li is added as a separate component to the M_2M' electrode to the extent of 20 atom percent or less of the M_2M' structure.
9. A negative electrode of claim 1, in which surplus M metal is added to the M_2M' electrode, to the extent of 50 atom percent or less.

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10. A negative electrode of claim 9, in which the surplus M metal is 20 atom percent or less.

11. A negative electrode for a non-aqueous electrochemical cell comprised of a compound having as its basic structural unit the formula M_2M' , and having a Cu_2Sb -type structure, in which M is one or more metal elements and M' is one or more metal or non-metal elements.

12. A negative electrode of claim 11, in which the M' atoms are selected from the Group Va elements excluding nitrogen.

13. A negative electrode of claim 12, in which the M' atoms are selected from P or As.

14. A non-aqueous electrochemical cell comprising a negative electrode, an electrolyte and a positive electrode the negative electrode including an intermetallic compound having as its basic structural unit the formula M_2M' in which M and M' are selected from two or more metal elements including Si, and the M_2M' structure is a Cu_2Sb -type structure.

15. A battery comprising of a plurality of cells, at least some cells including a negative electrode and a non-aqueous electrolyte and a positive electrode, said negative electrode having an intermetallic compound having as its basic structural unit the formula M_2M' in which M and M' are selected from two or more metal elements including Si, and having a Cu_2Sb -type structure.

17. A battery comprising a plurality of cells, at least some cells including a negative electrode and a non-aqueous electrolyte and a positive electrode, said negative electrode including an intermetallic compound having as its basic structural unit the formula M_2M' , and the M_2M' structure is a Cu_2Sb -type structure, in which M is one or more metal elements and M' is one or more metal or non-metal elements.